

① Solve for x algebraically

$$\textcircled{a} \quad 3x + 4 = 16$$

$$\quad \quad -4 = -4$$

$$\frac{3x}{3} = \frac{12}{3} \quad \boxed{x=4}$$

$$\textcircled{c} \quad 2x - 7 = 29$$

$$\quad \quad +7 \quad +7$$

$$\frac{2x}{2} = \frac{36}{2}$$

$$\textcircled{e} \quad -2x = 10$$

$$\quad \quad -2 \quad -2$$

$$\boxed{x=-5}$$

$$\textcircled{b} \quad 3x + 4 < 16$$

$$\quad \quad -4 \quad -4$$

$$\frac{3x}{3} < \frac{12}{3}$$

$$\boxed{x < 4}$$

$$\textcircled{d} \quad 2x - 7 \geq 29$$

$$\quad \quad +7 \quad +7$$

$$\frac{2x}{2} \geq \frac{36}{2}$$

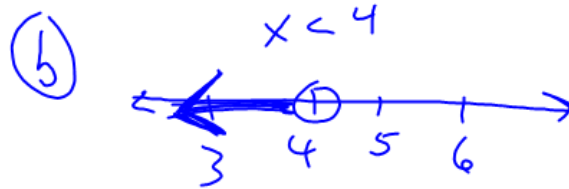
$$\boxed{x \geq 18}$$

$$\textcircled{f} \quad -2x \leq 10$$

$$\quad \quad -2 \quad -2$$

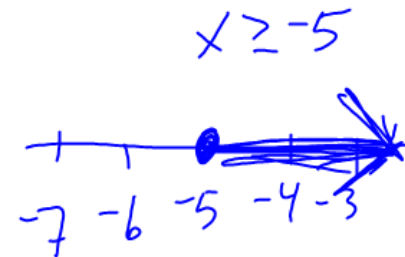
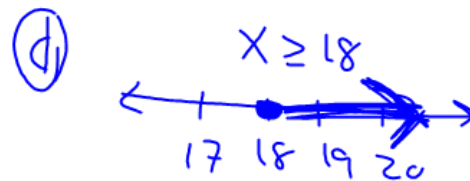
$$x \geq -5$$

② Graph your solutions to the inequalities on a number line.

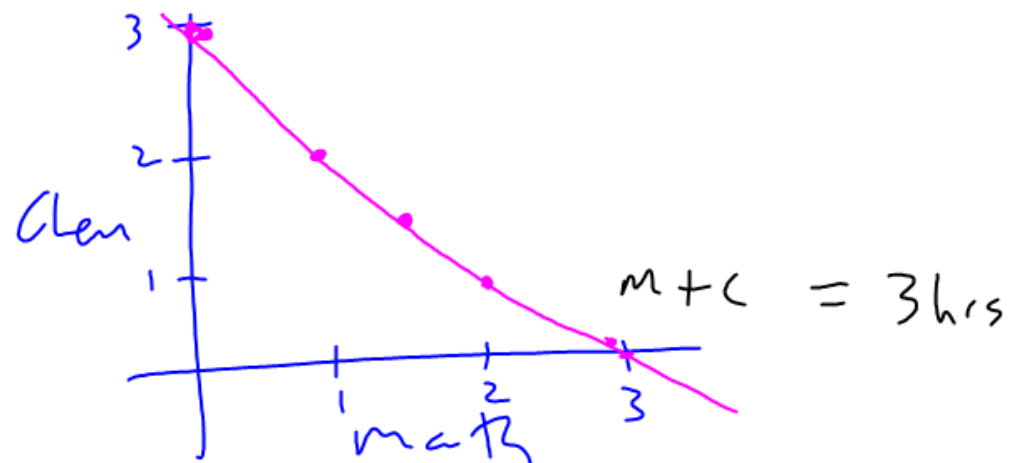


$$\frac{-6}{-2} < \frac{4}{-2}$$

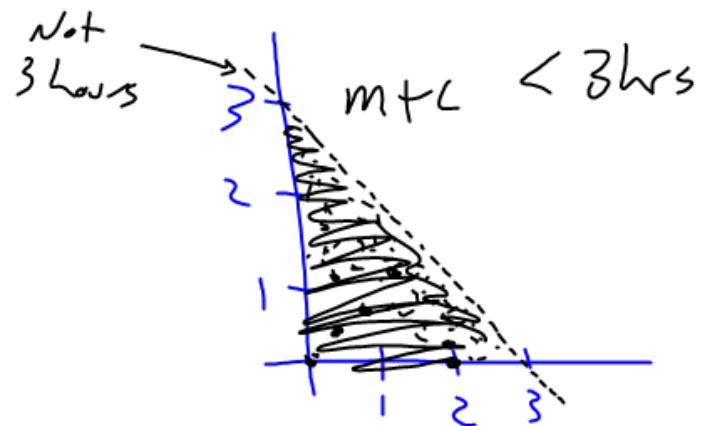
$$3 > -2$$



John studies 3 hours of math and chemistry



John "Studies" 3 hours of math and chemistry



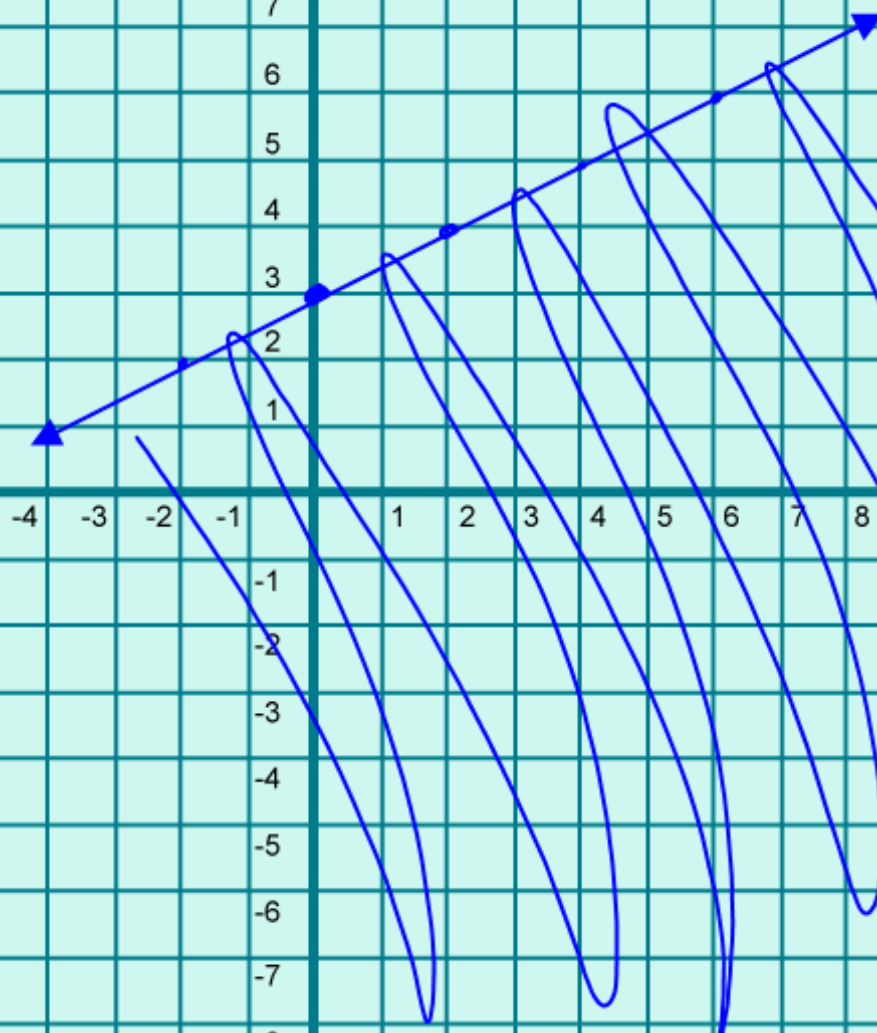
Graph $y \leq \frac{1}{2}x + 3$

X

-14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 1 2 3 4 5 6 7 8 9 10 11 12 13 14

10
9
8
7
6
5
4
3
2
1
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10

Y



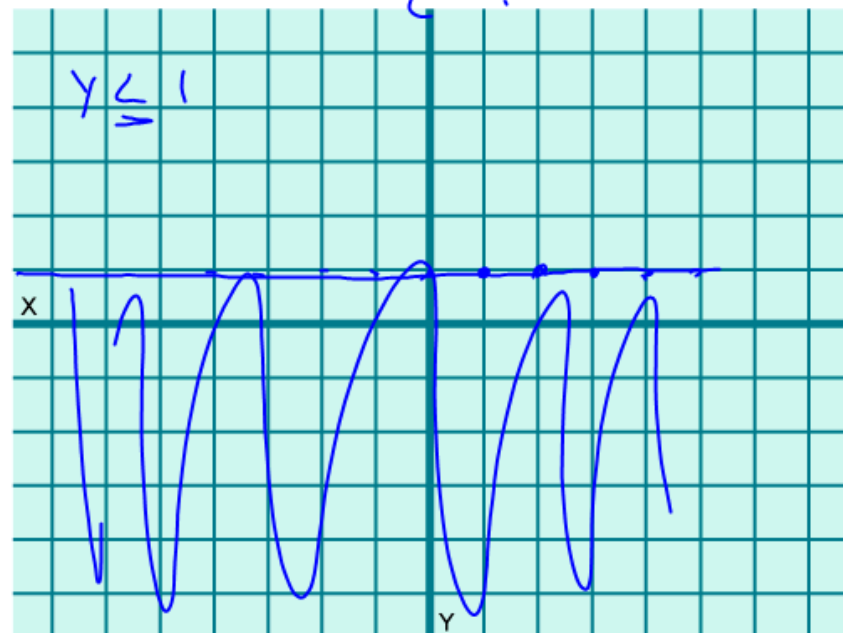
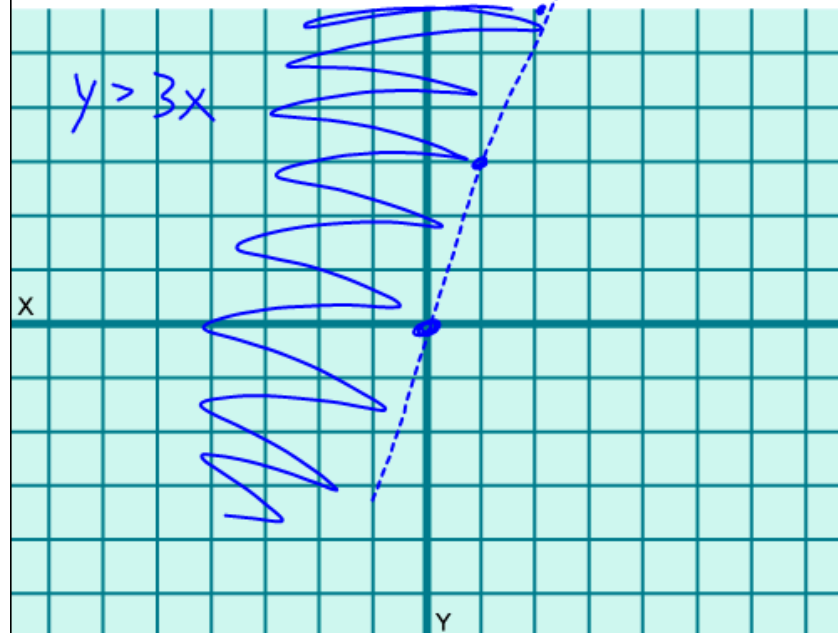
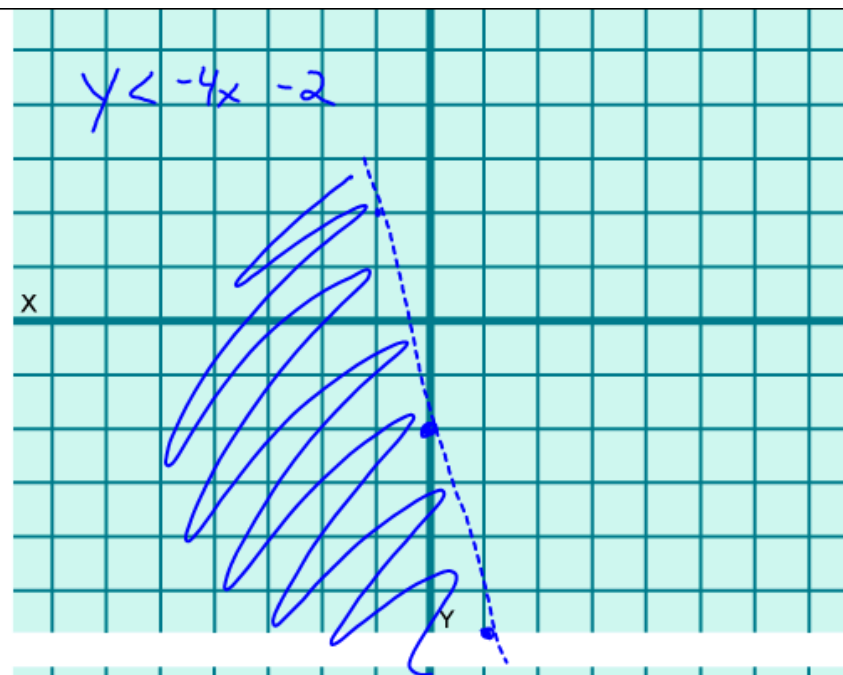
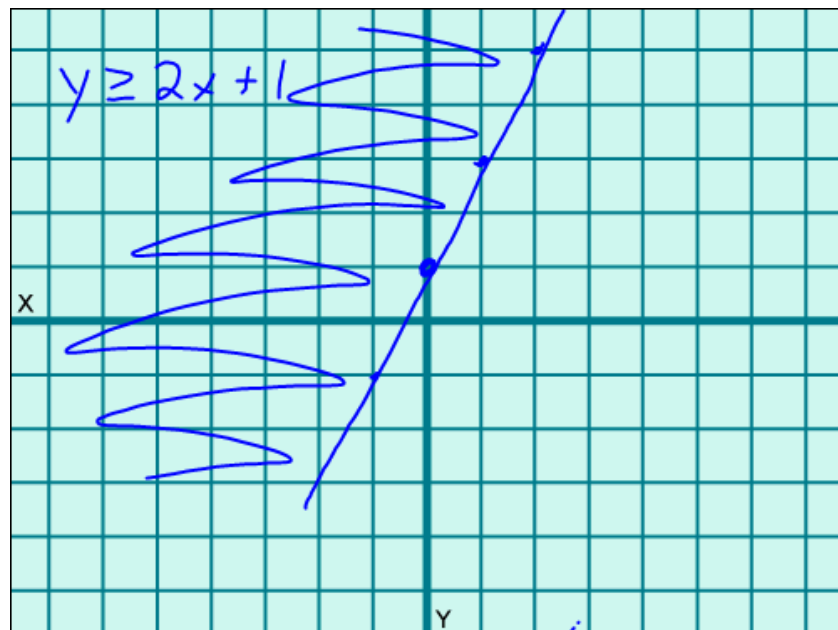
Graph

$$y \geq 2x + 1$$

$$y < -4x - 2$$

$$y > 3x$$

$$y \leq 1$$



6.6 #1-5

#6-9 - HW